The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(Currently Amended)** An optical fiber comprising a core comprising silica and a cladding surrounding the core characterized in that the core is doped with at least about 6 mol% germania and at least about 0.9 wt% fluorine, wherein the core exhibits a ratio of saturated index change at 1550 nm in the absence of hydrogen loading to numerical aperture is at least about 9.0×10^{-2}.

2. **(Original)** The optical fiber of claim 1, wherein the core is doped with at least about 7 mol% germania.

3. **(Previously Presented)** The optical fiber of claim 1, wherein the core is doped with at least about 1.2 wt% fluorine.

4. **(Previously Presented)** The optical fiber of claim 1, wherein the core is substantially devoid of boron.

5. **(Previously Presented)** The optical fiber of claim 1, wherein the core includes no other dopants in substantial amounts.

6. **(Previously Presented)** The optical fiber of claim 1, wherein the optical fiber has a numerical aperture of less than about 0.22 at 1550 nm.

7. **(Previously Presented)** The optical fiber of claim 1, wherein the core exhibits an index change of at least about 5.5×10^{-4} at a wavelength of 1550 nm when exposed to a dose of radiation having a wavelength of 244 nm and an energy of 428 J through a phase mask yielding an interference pattern with a visibility of about 80%, said exposure being performed without hydrogen loading of the optical fiber.

8. **(Previously Presented)** The optical fiber of claim 1 wherein the core exhibits a ratio of index change at 1550 nm to numerical aperture of at least about 3.0×10^{-3}, the index change being caused by an exposure in the absence of hydrogen loading to a dose of radiation having a wavelength of 244 nm and an energy of 428 J through a phase mask yielding an interference pattern with a visibility of about 80%.

9. **(Previously Presented)** The optical fiber of claim 1, wherein a Bragg grating is present in the core of the optical fiber.

10. **(Cancelled)**

11. **(Cancelled)**

12. **(Currently Amended)** A method of fabricating a fiber Bragg grating, the method comprising the steps of providing an optical fiber comprising

a core, the core comprising silica doped with at least about 6 mol% germanium and at least about 0.9 wt% fluorine , wherein the core exhibits a ratio of saturated index change at 1550 nm in the absence of hydrogen loading to numerical aperture is at least about 9.0×10^{-2}, and

a cladding surrounding the core; and

exposing a section of the optical fiber to patterned UV radiation, thereby writing the grating in the core of the fiber.

13. **(Original)** The method of claim 12, wherein the exposure is performed without hydrogen loading of the fiber.

14. **(Previously Presented)** The method of claim 12, wherein the core of the optical fiber is doped with at least about 7 mol% germania.

15. **(Currently Amended)** The method of ~~an one of~~ claim 12, wherein the core of the optical fiber is doped with at least about 1.2 wt% fluorine.

16. **(Currently Amended)** The method of ~~any one of~~ claim 12, wherein the core of the optical fiber is substantially devoid of boron.

17. **(Currently Amended)** The method of ~~any one of~~ claim 12, wherein the core of the optical fiber includes no other dopants in substantial amounts.

18. **(Currently Amended)** The method of ~~any one of~~ claim 12 wherein the optical fiber has a numerical aperture of less than about 0.22 at 1550 nm.

19. **(Original)** The optical fiber of claim 1, wherein the cladding comprises a material selected from the group consisting of substantially undoped silica, germania-fluorine co-doped silica, and phosphorus-fluorine co-doped silica.

20. **(Cancelled)**

21. **(Cancelled)**

22. **(Cancelled)**

23. **(Cancelled)**

24. **(Cancelled)**

25. **(Cancelled)**

26. **(Cancelled)**

27. **(Cancelled)**